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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,142	11/24/2003	Hooi Bin Lim	OSRMP2001-44-01	1141
26181	7590	02/10/2005	EXAMINER	
FISH & RICHARDSON P.C. 3300 DAIN RAUSCHER PLAZA MINNEAPOLIS, MN 55402			ERDEM, FAZLI	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/707,142	<b>Applicant(s)</b> LIM ET AL.	
	<b>Examiner</b> Fazli Erdem	<b>Art Unit</b> 2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/18/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. (6,373,187) in view of Uematsu et al. (4,916,503).

Regarding claims 1 and 7, Nagayama et al. in Figs 1, 2 and 4 disclose organic electroluminescent device where a device layer 120 on a substrate 102, partition walls/pillars 120a along a first direction on a substrate 102 where the partition walls/pillars 120a comprise a tapered profile and grooves between the pillars extend outside an active region to prevent electrical shorting, organic functional material 106 and conductive layer 107. Nagayama et al. fail to disclose the required electrode region. However, Uematsu et al. disclose a photo-electric converting device where the required electrode region is disclosed in Figs 2 and 16.

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to include the required electrode region in Nagayama et al. as taught by Uematsu et al. in order to have a light emitting device with increased performance.

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3. Claims 2-6 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. (6,373,187) in view of Uematsu et al. (4,916,503) further in view of Roitman et al. (6,111,356).

Regarding claims 2-6 and 16, Nagayama et al. in Figs 1, 2 and 4 disclose a device layer 120 on a substrate 102, partition walls/pillars 120a along a first direction on a substrate 102 where the partition walls/pillars 120a comprise a tapered profile and grooves between the pillars extend outside an electrode region to prevent electrical shorting, organic functional material 106 and conductive layer 107. Nagayama et al. fail to disclose the required electrode region, organic functional material dissolved in the solvent and the partition walls/pillars being inert to solvent. However, Uematsu et al. disclose a photo-electric converting device where the required electrode region is disclosed in Figs 2 and 16. Furthermore, Roitman et al. in Figs 1-6 disclose a method to form an OLED device with tapered pillars 30 over a transparent substrate 12 coating the substrate 12 with a solution comprising an organic functional material dissolved in a solvent where the pillars 30 being inert to solvent.

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to include the required electrode region, functional material dissolved in a solvent and pillars being inert to solvent in Nagayama et al. as taught by Roitman et al. in order to have an organic electroluminescent device with higher performance.

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4. Claims 8-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Nagayama et al. (6,373,187) in view of Uematsu et al. (4,916,503) further in view of Roitman et al. (6,111,356) further in view of Wolk et al. (6,140,009)

Regarding Claims 8, 9 and 10-15, Nagayama et al. in Figs 1, 2 and 4 disclose a device layer 120 on a substrate 102, partition walls/pillars 120a along a first direction on a substrate 102 where the partition walls/pillars 120a comprise a tapered profile and grooves between the pillars extend outside an electrode region to prevent electrical shorting, organic functional material 106 and conductive layer 107. Nagayama et al. fail to disclose the required electrode region, organic functional material dissolved in the solvent and the partition walls/pillars being inert to solvent and the required flexible substrate. However, Uematsu et al. disclose a photo-electric converting device where the required electrode region is disclosed in Figs 2 and 16. Roitman et al. in Figs 1-6 disclose a method to form an OLED device with tapered pillars 30 over a transparent substrate 12 coating the substrate 12 with a solution comprising an organic functional material dissolved in a solvent where the pillars 30 being inert to solvent. Furthermore, Wolk et al. disclose a thermal transfer element for forming multilayer devices where in Fig. 1A, 102 is a flexible substrate.

It would have been obvious to one of having ordinary skill in the art at the time the invention was made to include the required electrode region, flexible substrate in Nagayama et al. as taught by Wolk et al. in order to have an organic light emitting device with higher reliability

***Conclusion***

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fazli Erdem whose telephone number is (571) 272-1914. The examiner can normally be reached on M - F 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FE

February 4, 2005

NATHAN J. FLYNN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

